

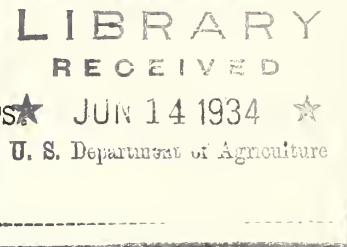
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July 1, 1933.

CIRCULAR.

INSTRUCTIONS FOR MAKING FOUR-HOURLY REPORTS



Introduction

The following instructions are a revision of those given in the Circular, "Instructions for Making Three-Hourly Reports" and supersede all previous instructions in the matter. They will become effective with the first observation on July 15, 1933.

This Circular is divided into two parts, one applying to reports by special message using code, the other to special four-hourly data to be added to regular radio and teletype sequence reports without using code. Officials are requested to read the instructions carefully, so that the system applying to their station is understood without confusion.

Observations made in accordance with the following instructions are to be prepared with the same standard of accuracy as that required in all Weather Bureau work. Deviations from this standard are not permissible.

SECTION I.

FILING OF REPORTS.

1. (a). The reports sent by telegraph, or telephone and telegraph, will be filed between 15 and 12 minutes preceding the hours of 4 and 8 a.m. and p.m. and 12 noon and midnight, daily, Eastern Standard Time, except in cases where specific authority for varying this time has been issued.

(b). Reports sent as a special message by radio will be filed at the times specified in "a".

(c). In reports sent by teletype the special four-hourly data as hereinafter prescribed will be added to the sequence reports transmitted nearest the hours specified in "a".

U. S. DEPARTMENT OF AGRICULTURE.

WEATHER BUREAU

WASHINGTON.

Office of the Chief.

July 15, 1933.

CIRCULAR

INSTRUCTIONS FOR MAKING FOUR-HOURLY REPORTS.

- I. FILING OF REPORTS.
- II. PREPARATION OF REPORTS SENT BY TELEGRAPH OR AS SPECIAL MESSAGE
BY RADIO.
- III. INSTRUCTIONS FOR ADDING FOUR-HOURLY DATA TO TELETYPE AND RADIO
SEQUENCE REPORTS.

SECTION II.

PREPARATION OF REPORTS SENT BY TELEGRAPH OR AS SPECIAL MESSAGES BY RADIO.

2. The following order of elements will be used in all reports transmitted by telegraph or as special message by radio:

- (a) Ceiling (paragraph 3)
- (b) Sky (Paragraph 4)
- (c) Visibility (paragraph 5)
- (d) Weather (when appropriate) (paragraph 6)
- (e) Obstructions to Vision (when appropriate) (paragraph 7)
- (f) Temperature and dew point depression (coded) (paragraphs 8-13)
- (g) Wind direction and velocity (paragraph 14)
- (h) Barometric pressure (coded) (paragraph 15)
- (i) Remarks (paragraph 16)
- (j) Pressure change (coded) (paragraph 17)
- (k) Clouds (coded) (paragraphs 18-21)
- (l) Thunderstorms not included under "Weather", when appropriate (coded) (paragraph 22)
- (m) Depth of snow, at 8 p.m., when appropriate (coded) (paragraph 23)

3. CEILING:- This will be reported in accordance with the terms and instructions contained in Paragraphs 34-37, inclusive, of Circular N, 1932, except as regards its order in the report and except that the word "estimated" will not be sent.

4. SKY:- This will be reported in accordance with instructions contained in Paragraphs 12-18, inclusive, of Circular N, 1932, except that the word "clouds" will be omitted, and except as regards its order in the report.

5. VISIBILITY:- This will be reported in accordance with instructions given in Paragraphs 40-44, inclusive, of Circular N, except as regards its order in the report.

6. WEATHER:- This will be reported in accordance with instructions contained in Paragraphs 19-22, inclusive, of Circular N, 1932, except as regards its order in the report.

7. OBSTRUCTIONS TO VISION:- These will be reported in accordance with Paragraphs 23-29, inclusive of Circular N, 1932, except as regards its order in the report.

8. TEMPERATURE AND DEPRESSION OF THE DEW POINT:- These data will be reported by use of the regular barometer - temperature code on pages 19-28, inclusive, of the 1931 Weather Code, the first code element of the words to represent the temperature and the second the depression of the dew point. Thus "NIBBING" would indicate a temperature of 66 and a dew point depression of 16.

9. If only one degree depression is obtained this will be sent as 2 degrees. If a depression is obtained but this is less than one degree the letter "S" will be added to the code words for zero or 100 degrees given at the head of each column in the code book, the same code words without the "S" being used for zero depressions.

10. In the event that the temperature and/or the depression are actually odd figures the next lower figure will be coded, except as noted above for one degree depression; i.e., a temperature of 47 would be coded as 46; a depression of 15 would be coded as 14; a temperature of 63 and a depression of 11 would be coded as 62 and 10, etc.

11. Below zero temperatures will be indicated in the usual manner, i.e., by use of the same code with the temperature being indicated by subtraction from 100; there being almost no chance of confusing the two extremes since they will occur in practically all localities at different periods of the year. Thus "SOAPBUBBLE" in winter would indicate a temperature of 12 below zero and a dew point depression of 10 degrees, etc.

12. Actual temperatures obtained, such as 47.2, 61.1, and 33.6 would, of course, be coded as 48, 62, and 34 respectively.

13. It is realized that the above system has the tendency to increase or decrease depressions under certain conditions but this is not believed to be serious. However, the actual depression and not the depression with respect to the coded temperature will always be sent; i.e., if the actual temperature is 37.0 (sent as 36.0) and the dew point depression is 6 degrees, the temperature of 36 and the depression of 6 will be coded.

14. WIND:- The surface wind will be reported in accordance with instructions given in Paragraphs 45-50, inclusive of Circular N. 1932, except as regards its order in the report.

15. BAROMETRIC PRESSURE:- This will be reported by use of the code words for zero or 100-degree temperatures taken from the regular barometer/temperature code on pages 19-28, inclusive, of the 1931 Weather Code. Pressures lower than 29.50 will be indicated by the word "NINE" preceding the code word and those higher than 30.99 will be preceded by the word "ONE". Thus "BULK" would indicate a pressure of 30.10; "DEBT", 30.24; "SING", 29.86; "NINE GIG", 29.46; "ONE BEAK", 31.14; etc.

16. REMARKS:- These will be reported when appropriate in English immediately following the barometric pressure code word in accordance with instructions contained in Paragraph 71 of Circular N, 1932.

17. PRESSURE CHANGE:- A pressure change word to indicate the accumulative pressure change during the three hours previous to the observation will be included following the "Remarks" by use of the "K" words on page 47 of the 1931 Weather Code. This change will be determined by comparison between the current pressure and the pressure three hours previously, the barograph trace being used for this purpose if necessary when no observation was made three hours previously. Thus, "KEEPING" would indicate a net rise of .06 "KINDLE" a net fall of .04; "KEY" a net rise of less than .02; etc. "KURD" will be used to indicate zero net change.

